

QA33 – Growth Measurements and Energy Needs for Native Babies

QUESTION:

Is there any difference in energy needs and growth patterns of native (Alaskan/American) infants and non-native infants? Several of my (native) clients are noting that their infants don't seem to be "full" with recommended amounts of formula, are eating often, and are often "high" weight for height.

In the Samoan population, we are noting high weight for age and length for age (especially at birth) and average weight for height/length during infancy and childhood.

Our approach has been to help the parent to recognize hunger cues, normal infant feeding patterns (e.g. frequent feeding is normal), accurate formula mixing, and understanding growth spurts.

ANSWER:

This is a complex question to answer. Traditionally arctic and sub arctic populations have had a characteristic food pattern that is extremely high in energy. This subsistence food pattern utilized fish, mammals, bird eggs, and seasonal berries, and moderate amounts of commercially available foods. Overall, these diets were high in protein, moderate to high in fat, somewhat limited in carbohydrates, and seasonally low in some vitamins and minerals. In the villages in Alaska today, these patterns are still prevalent. Perhaps the cultural imperative of 'feast or famine' is still a part of family life in urban settings.

In a similar population to Alaska Natives, heavy birthweight has been documented as 50% more frequent among Native Indians than non-Indians in British Columbia. The rate of preschool age obesity was reported as higher among Alaska Natives than representative rates for the United States all-races combined. These children may well be born at a 'high weight for length' and also be at high risk for preschool-age development of obesity.

Alaska Native infants are often 'high weight for length' depending upon genetics, and family food patterns and beliefs. As long as these children are 'growing in channel' and not crossing channels of growth, it can be assumed that growth is within 'normal' limits.

Teaching responsiveness to cues of hunger and satiety and the development of a 'food pattern' rather than 'random' eating is a healthy approach for these infants who may be 'genetically' bigger and at significant risk for developing obesity. Perhaps this early training will support life long appropriate food intake patterns and prevent obesity for these children.

References:

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- 3) Thompson M. Heavy Birthweight in Native Indians of British Columbia. Can J Public Health 81:443, 1990.
- 4) Broussard BA et al. Prevalence of obesity in American Indians and Alaska Natives. Am J Clin Nutr 53: 1535S, 1991.
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